# THE RESEARCH EXPERIENCE

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Hypotheses:

- 1. The interaction between reward sensitivity and rumination will predict inflammatory responses to stress and depressive symptoms.
- 2. Inflammatory responses will mediate the relationship between reward sensitivity and depressive symptoms.
- 3. Rumination will moderate the relationship between reward sensitivity and depressive symptoms.

#### INTRODUCTION

The research looks at an immunocognitive model of mood disorders. Acute inflammatory stress reactivity has been established as a correlate of depression. Furthermore, rumination and abnormal reward sensitivity are both risk factors for depressive symptoms such that both hypo and hypersensitivity confer risk for depressive symptoms which are maintained/worsened by rumination. Therefore, given the effect of reward sensitivity and rumination as risk factors for depressive symptoms, and their effect on inflammatory stress reactivity, the study aims to integrate these processes using a moderated mediation in which rumination reacts with reward sensitivity to influence the risk for acute inflammation and consequently, depressive symptoms.

## METHODOLOGY

**STEP 1:** Participants are asked to do two blood draws, one before and one after the stress task to measure for inflammatory reactivity.

STEP 2: They are then asked to complete the laboratory stress challenge called the Anger Incentive Delay Task (AIDT)
STEP 3(a): After the second blood draw, they are instructed to complete a survey consisting of self-report measures for:

Reward Sensitivity (BIS/BAS & SPSRQ)
Rumination (RSS & BSRI)
Depression (BDI-II)

STEP 3(b): Participants are asked to complete a 2 week follow up survey where they are asked to complete the above mentioned self-report measures again.

## ANALYSIS

Primary Aim (Hypothesis 1) will be tested using regression analysis. The secondary Aim (Hypothesis 2 and 3) will be tested using mediation and moderation mediations.

The study is still ongoing and therefore additional aims will be addressed once data collection is complete.



#### CONSENT



What is the consent process supposed to look like? What does an informed consent process look like that takes into account cultural and individual differences? How can we do that when trying to formulate a consent form for a diverse sample

Research has shown that people comprehend shorter, succinct forms better and interpret themselves as having more autonomy over themselves during the research process when they are not made to legally sign anything. Furthermore, strides have been made to form culturally competent, informed consent procedures. This requires an in depth understanding by the researcher of their target population that allows them to critically address possible barriers to informed consent within that population.

### SAMPLING

What barriers do researchers and participants from heterogenous samples face in engaging with research?

How can researchers account for behavioural differences in experimental design that are caused by different interpretations of the design (due to differing cultural and individual frames of reference) rather than psychological differences?

The solution lies in open science practices wherein research is able to acknowledge its lack of generalisability when using homogenous samples. Furthermore, multicultural education, training, research, practice, and organisational change for psychologists would help them be more cognisant of misattributing differences when conducting research.

## PRACTICES

How does the presence of the researcher affect the way participants respond to/interpret the experimental design?

How do we streamline this approach to reduce the possible effects a researcher's presence could have in the experiment without removing the human element from research? Where do we draw the line??

Creating generalisable methodology such as scripts that researchers follow when conducting research minimises the effect of possible confounds. It also allows for more accurate replication and reproducibility of research. One thing to be mindful of when conducting research in psychology is that we should not remove the presence of the human experience from the study of it.



## FINAL THOUGHTS

My experience in the Mood and Cognition Lab gave me an important and in-depth insight into the world of research in Psychology. I was not only able to understand the various considerations that researchers grapple with when deciding how to conduct and disseminate their research, but was also able to deepen my knowledge of various concepts in Psychology such as the relationship between inflammatory reactivity and depressive symptoms. Consequently, my Praxis course allowed me to critically reflect on all that I observed and learnt about in the lab. Reflecting on various aspects of the process such as consent, reading articles about it, and talking it through with my faculty advisor, added an important layer of analysis to my understanding of the research process.